

**Basic standard for the calculation and measurement of electromagnetic field strength and SAR related to human exposure from radio base stations and fixed terminal stations for wireless telecommunication systems (110 MHz - 40 GHz)**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 50383:2010 sisaldb Euroopa standardi EN 50383:2010 ingliskeelset teksti.	This Estonian standard EVS-EN 50383:2010 consists of the English text of the European standard EN 50383:2010.
Standard on kinnitatud Eesti Standardikeskuse 30.11.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 30.11.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kätesaadavaks tegemise kuupäev on 11.06.2010.	Date of Availability of the European standard text 11.06.2010.
Standard on kätesaadav Eesti standardiorganisatsionist.	The standard is available from Estonian standardisation organisation.

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English version

**Basic standard for the calculation and measurement of electromagnetic field strength and SAR related to human exposure from radio base stations and fixed terminal stations for wireless telecommunication systems (110 MHz - 40 GHz)**

Norme de base pour le calcul et la mesure des champs électromagnétiques et SAR associés à l'exposition des personnes provenant des stations de base radio et des stations terminales fixes pour les systèmes de radiotélécommunications (110 MHz - 40 GHz)

Grundnorm für die Berechnung und Messung der elektromagnetischen Feldstärke und SAR in Bezug auf die Sicherheit von Personen in elektromagnetischen Feldern von Mobilfunk-Basisstationen und stationären Teilnehmergeräten von schnurlosen Telekommunikationsanlagen (110 MHz bis 40 GHz)

This European Standard was approved by CENELEC on 2010-06-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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**CENELEC**

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

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## Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 106X, Electromagnetic fields in the human environment. It was submitted to the Unique Acceptance Procedure as a draft amendment and approved by CENELEC as a new edition on 2010-06-01.

This European Standard supersedes EN 50383:2002.

The main changes compared to EN 50383:2002 are as follows (minor changes are not listed):

- the frequency range has been extended to cover 300 MHz to 6 GHz now, was 300 MHz to 3 GHz before
- the references to EN 50361 have been updated with referring to EN 62209-2:2010 now and paragraphs have been removed, that are covered by EN 62210-2
- the former Annex A "Boundaries between field regions" has been replaced by an Annex "Considerations for using far-field method"

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2011-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-06-01

*This document is a review generated by EVS*

## 1 Scope

This basic standard applies to radio base stations and fixed terminal stations for wireless telecommunication systems as defined in Clause 4, operating in the frequency range 110 MHz to 40 GHz.

The objective of the standard is to specify, for such equipment, the method for assessment of compliance distances according to the basic restrictions (directly or indirectly via compliance with reference levels) related to human exposure to radio frequency electromagnetic fields.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 62209-2:2010, *Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 2: Procedure to determine the specific absorption rate (SAR) for mobile wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)*

ISO/IEC 17025:1999, General requirements for the competence of testing and calibration laboratories

ISO/IEC Guide 98-3:2008, *Uncertainty of measurement – Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*

Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz) (Official Journal L 197 of 30 July 1999)

International Commission on Non-Ionizing Radiation Protection (1998), Guidelines for limiting exposure in time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz). Health Physics 74, 494-522.

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